

Raython Model Q

All-in-one ESS Solution

For Mini-grid and Industrial & Commercial ESS Applications
33kW 43.2kWh~54kWh (90% DoD)

Highlights

- Modular design, expandable up to 330kW, 1.08MWh (10 units)
- All-in-one design for easy installation and low maintenance
- 24/7 local monitoring and control on E7 LCD Monitoring
- System remote monitoring on NOVA App & Web
- Factory assembled and tested system enables you get free from complicated groundwork

Note:

1. Raython Model Q supports one more group of EnergyCube LH75 batteries (up to 54kWh).
2. When two or more Raython Model Q are to be connected in parallel, an additional AC distribution cabinet is required for parallel operation.



RAYTHON MODEL Q

Qoma 33H-R E7 LCD Monitor

- ✓ PCS
- ✓ 33kW



PDP-Q1

- ✓ AC Distribution Box
- ✓ Communication Transfer Board

BCU100

- ✓ LH75 Battery Controller

LH75 High Voltage Lithium Battery Module

- ✓ 3.6kWh each
- ✓ Support 12~15 units LH75 connected in Series

Model NO.	Raython Model Q
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System Specification

Nominal Output Power	33kW
Maximum AC Input Power	33kW
Battery Capacity Range	43.2kWh~54kWh (90% DoD)
Battery Chemistry	LiFePO4
IP Protection	IP20
Cabinet Dimension(W *D* H)	1300*700*2000
Cabinet Weight	TBD
Warranty	3 years product warranty, 10 years performance warranty

Inverter Technical Specification

Model	Qoma33H-R
Battery Voltage Range	400~850V
Max. Charging/ Discharging Current	62A

AC Side (Grid)

Nominal Output Power	33kVA@45°C, 30kVA@50°C
Nominal AC input Current	50A
Nominal AC Voltage/ AC Voltage Range	400V/230V, -20%~15%
Nominal Grid Frequency/Frequency Range	50Hz: 47Hz~52Hz; 60Hz: 57Hz~62Hz
AC Current THD	< 3 % (at nominal power)
Power Factor at Nominal Power /Adjustable Power Factor	> 1 leading -1 lagging
Adjustable Reactive Power	-100%~100%

AC Side (Micro-Grid)

Nominal AC Voltage	400V/230V, -20%~15%
AC Voltage THD	< 1 % (Resistance Load)
Unbalance Load Capacity	1
AC Output Power	45kW/30s

General

Maximum Charge Efficiency	0.98
Reverse Polarity Protection	Yes
Overvoltage Protection	DC Type II / AC Type III
Grid Monitoring /Ground Fault Monitoring	Yes/ Yes
Insulation Monitoring	Yes
Overheat Protection	Yes
Degree of Protection	IP65
Operating Ambient Temperature Range	-25 to 60 ° (> 45 ° de-rating)
Allowable Relative Humidity Range (non- condensing)	0 -100 %
Cooling Method	Temperature controlled forced air cooling
Max. Operating Altitude	4000 m (> 3000 m de-rating)
Safety	IEC/EN62477-1, IEC/EN62040-1
EMC	EN61000-6-1/-2/-3/-4;
Grid Regulation	IEC62116, IEC61727, NRS097-2-1
Grid Support	LVRT, Active & Reactive Power control and power ramp rate control

Lithium Battery Technical Specification

Module Model	LH75
Module Capacity	3.6kWh
Module Nominal Voltage	48VDC
Operating Temperature Range	-10 C ~+55 C
Maximum Charging /Discharging Current	37.5A/37.5A
Safety	IEC62619
EMC	EN61000-6--2/-4;
Battery Modules	12~15 LH75 in Series